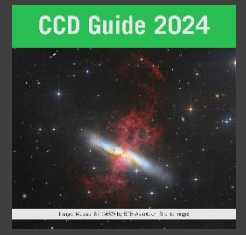
CCD Guide 2024

Image: Messier 82 (M82) by BTB-Astroteam Brentenriegel



The CCD-Guide project

ccdguide.com

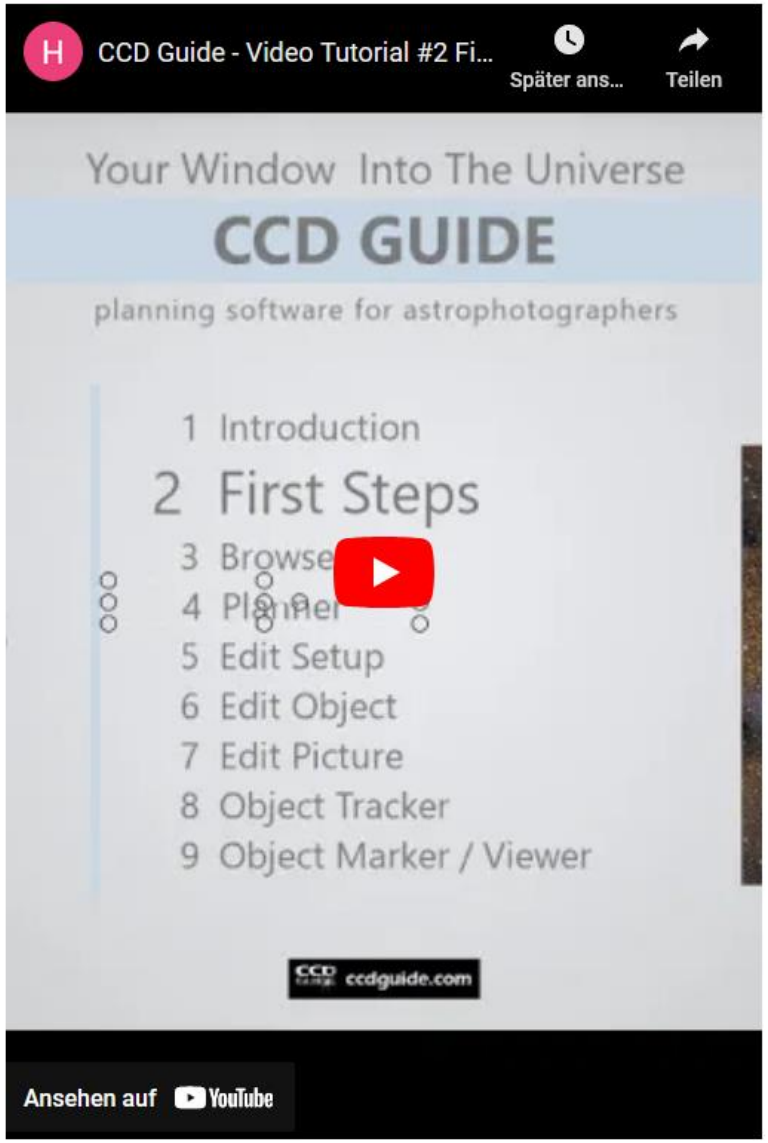
- Annually since 1997
- > 5000 images from 58 astrophotographers
- Including software
  - Extensive deep sky object database
  - Simultaneous viewing of object data, image data and preview image
  - Filtering of images according to various criteria
  - Create a slide show of selected images
  - Input of own images
  - ObjectTools for observation planning and object searches
  - Minimum system requirements

ccdguide.com About Shop Newsletter Blog

Video tutorials

Introduction & Hightlights:

First Steps:



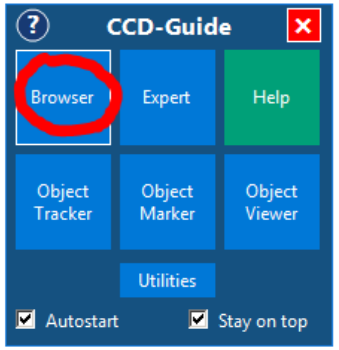
Video tutorials on ccdguide.com

FAQ

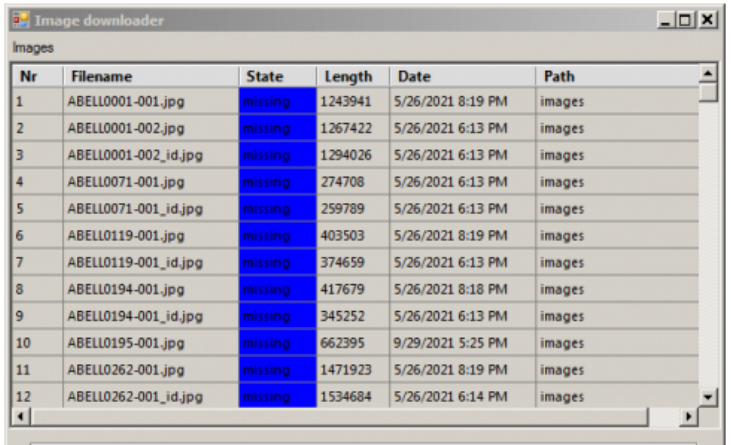
LEVEL A

A01 - How do I install CCD-Guide?
A02 - How can I download the images?
A03 - As a newcomer, what is the best way to start with CCD-Guide?
A04 - How do I find astrophotos of a particular object?
A05 - How can I filter the astrophotos according to certain criteria, such as constellation, object type, camera or telescope, etc.?
A06 - How can I identify the objects in a CCD-Guide astrophoto?
A07 - How do I find suitable objects for an astro holiday with minimal effort?
A08 - When is the best time to observe a particular object today?
A09 - How can I create a new location in the ObjectTracker?
A10 - What to do if the virus scanner causes problems?
A11 - How can I make a CCD Guide update?

1. Start CCD_Guide.exe and then click on the Browser button to start the CCD-Guide Browser.



2. At the same time as the Browser window appears, the Image downloader window opens automatically as soon as no images are available or images are still missing. Pressing the Start button in the Image downloader starts the download of the images. The download can run in the background, be paused and restarted at any time. The Image downloader window can also be started via the menu "File" -> "Start image downloader".



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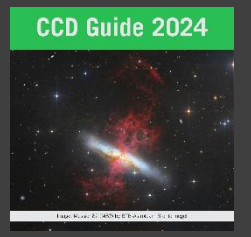
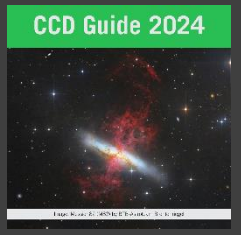
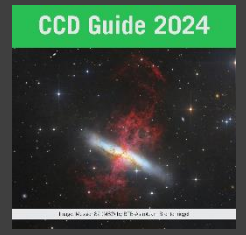
10	ABELL0195-001.jpg	missing	662395	9/29/2021 5:25 PM	images
11	ABELL0262-001.jpg	missing	1471923	5/26/2021 8:19 PM	images
12	ABELL0262-001_id.jpg	missing	1534684	5/26/2021 6:14 PM	images



FAQs on ccdguide.com

What‘s new in CCD-Guide 2024?

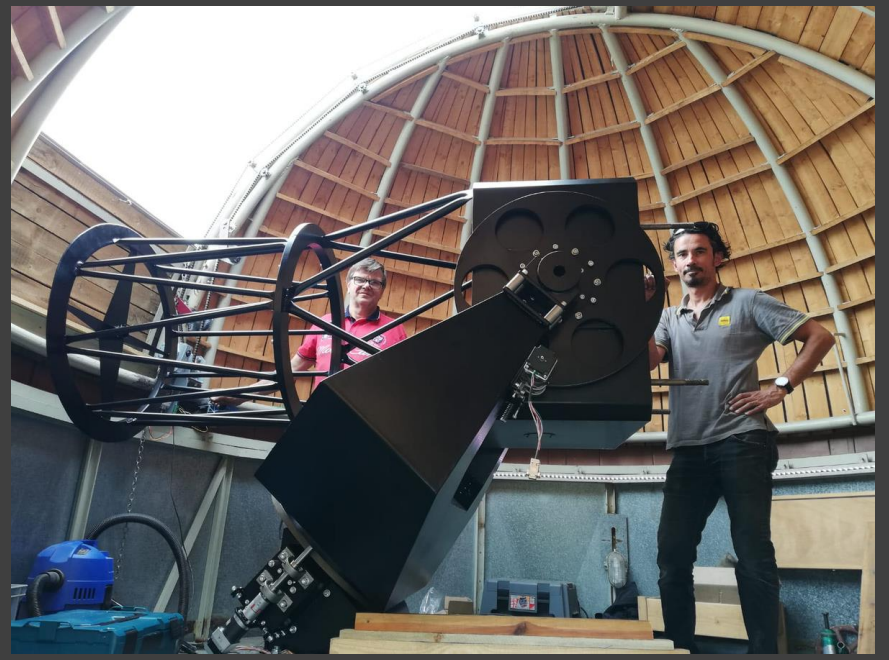




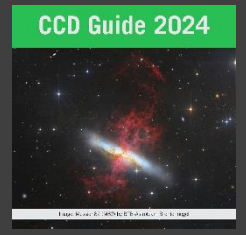
Three new astrophotographers

Edith Mader

Robert Reitsam



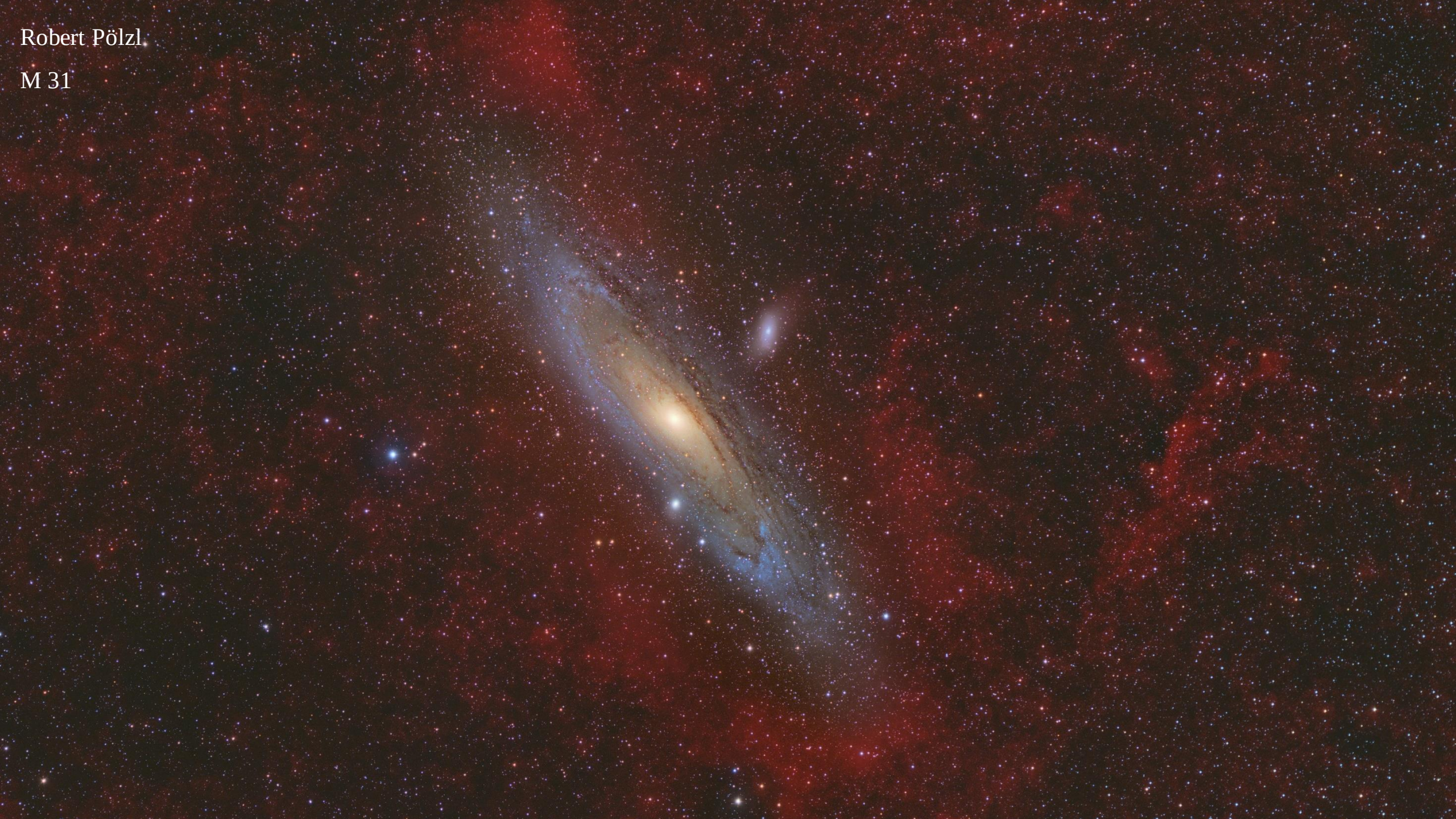
Astroteam Brentenriegel



472 new images

- Very high quality
- Many new objects -> 1300 objects

Franz Klauser & Manfred Wasshuber
Comet C/2022 E3 near Mars


Robert Pölzl
M 31

Bernhard Hubl
PN Abell 12

BTB Astroteam Brentenriegel
NGC 3166 + NGC 3169

Gerald Rhemann
LDN 43

Herbert Walter
NGC 2547

DSI Team & Markus Blauensteiner & Oliver Schneider
NGC 3201

Konstantin von Poschinger

Sandqvist 7

Günter Kerschhuber

IC 10

Thomas Henne
Sh 2-64

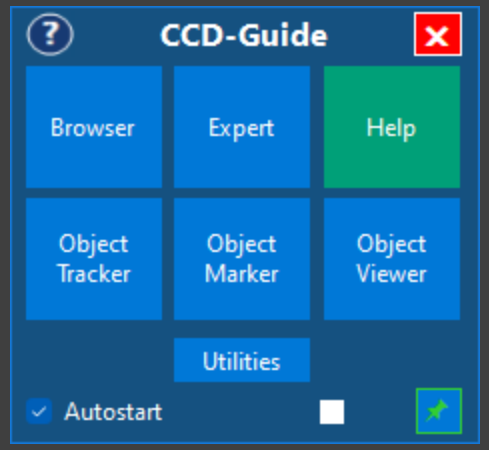
Christoph Flixeder
WR 134

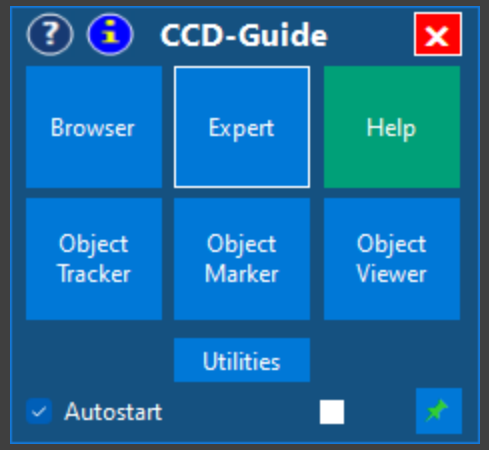
CCD-Guide 2024 – Download

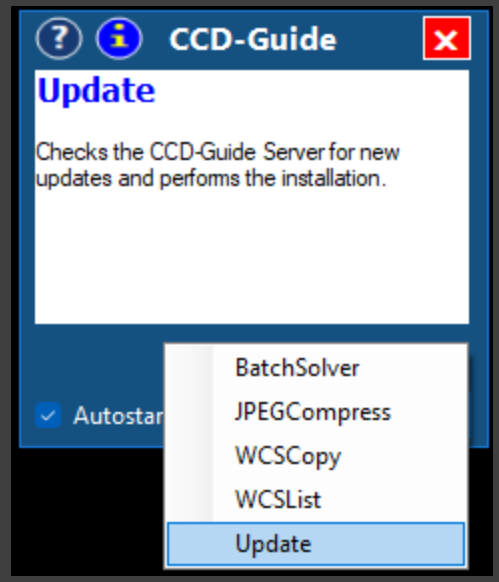
- Download of software in web shop
  - Zip file (approx. 40MB)
  - Download of images (approx. 13GB) with CCD-Guide software

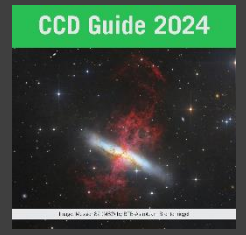
- USB-Stick (16GB)
  - Delivery only to Europe (except UK)

CCD-Guide 2024 software









Browser – Download of images

CCD Guide Browser, Version 4.2.8645.21063

File Options About

ABELL0001-001.jpg

Extended Informatic

Photographer
Hubl Bernhard

Additional objects
more...

Objectname Filter | All objects | Set Filter | Reset Filter | Browse | Database: Master | Actions: >>> | Listview: Simple | Mode

Image filename	Object name	Object type	Constellation	Total exposure	Camera	Observation date	Telescope
ABELL0001-001.jpg	ABELL 1	Galaxy Cluster	Pegasus	1440	QSI 660wsg	2015-09-09	Newtonian
ABELL0001-002.jpg	ABELL 1	Galaxy Cluster	Pegasus	408	Canon EOS 6D	2015-11-01	Takahashi FSQ-106 ED
ABELL0119-001.jpg	ABELL 119	Galaxy Cluster	Cetus	180	Starlight Xpress SXV-H9	2011-09-03	Newtonian
ABELL1314-001.jpg	ABELL 1314	Galaxy Cluster	Ursa Major	1224	SBIG ST-2000XM	2012-03-16	Newtonian
ABELL1314-002.jpg	ABELL 1314	Galaxy Cluster	Ursa Major	720	SBIG ST-8300C	2012-03-16	TeleVue NP-101
ABELL1367-002.jpg	ABELL 1367	Galaxy Cluster	Leo	1120	Moravian G3-16200	2018-02-27	ASA 10N f 3.6
ABELL1367-003.jpg	ABELL 1367	Galaxy Cluster	Leo	372	Canon EOS 6Da	2019-04-01	Newtonian
ABELL1367-004.jpg	ABELL 1367	Galaxy Cluster	Leo	1672	QSI 660wsg	2022-03-03	Newtonian
ABELL1656-002.jpg	ABELL 1656	Galaxy Cluster	Coma Berenices	1370	Canon EOS 1000Da	2011-04-21	Skywatcher ED 120/900mm
ABELL1656-006.jpg	ABELL 1656	Galaxy Cluster	Coma Berenices	270	SBIG STL-11000M	2005-05-10	Cassegrain
ABELL1656-008.jpg	ABELL 1656	Galaxy Cluster	Coma Berenices	1140	SBIG ST-8300M	2015-04-21	Newtonian

Image downloader

Images

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4	ABELL0071-001.jpg	loaded	274708	4/6/2022 5:44 PM	images
5	ABELL0071-001_id.jpg	loaded	259789	4/6/2022 5:44 PM	images
6	ABELL0119-001.jpg	loaded	403503	4/6/2022 5:44 PM	images
7	ABELL0119-001_id.jpg	loaded	374659	4/6/2022 5:44 PM	images
8	ABELL0194-001.jpg	loaded	417679	4/6/2022 5:44 PM	images
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11	ABELL0262-001.jpg	missing	1471923	4/6/2022 5:44 PM	images
12	ABELL0262-001_id.jpg	missing	1534684	4/6/2022 5:44 PM	images
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14	ABELL0347-002_id.jpg	missing	1805503	4/6/2022 5:44 PM	images
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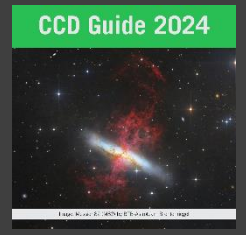
Counts: 6702 images waiting for download. Total: 12623 MB

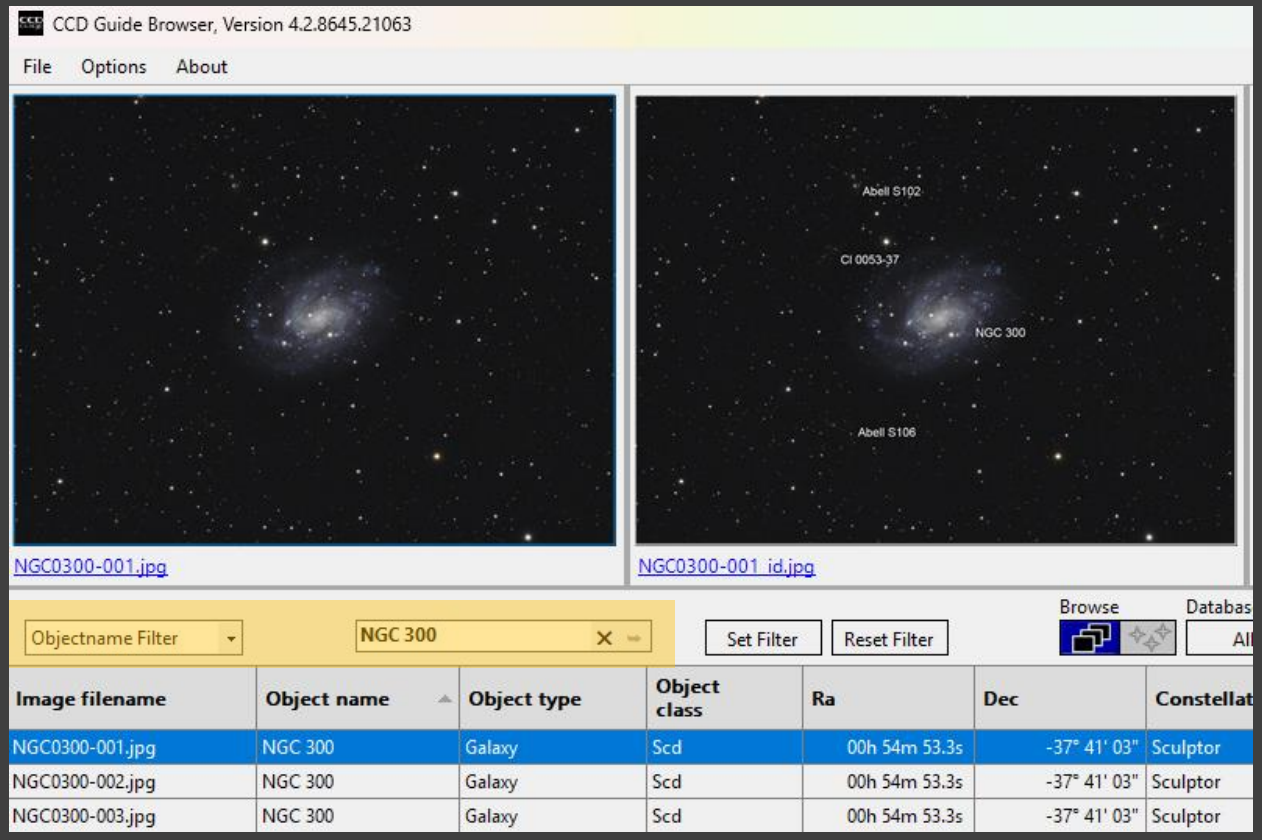
total: 6711 AutoDownloadCheck

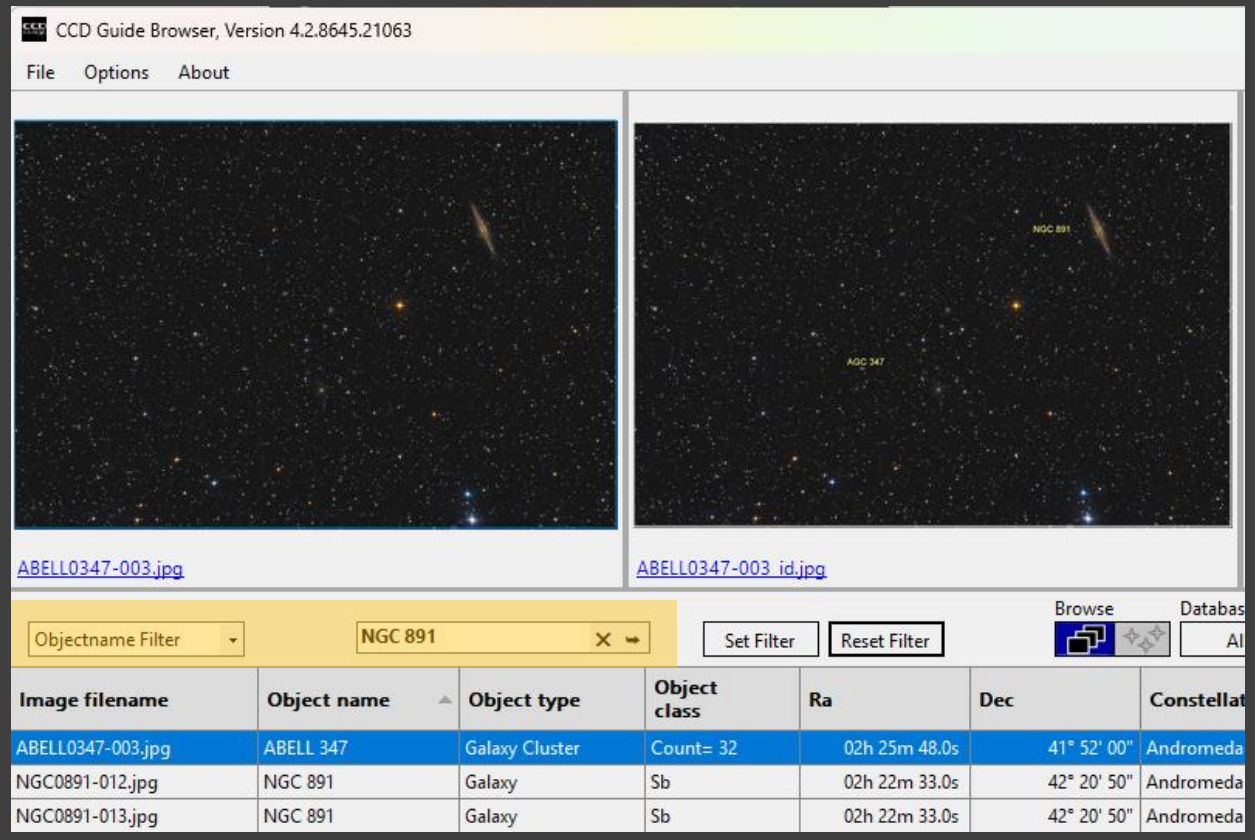
completed: 9 Pause 0% Continue



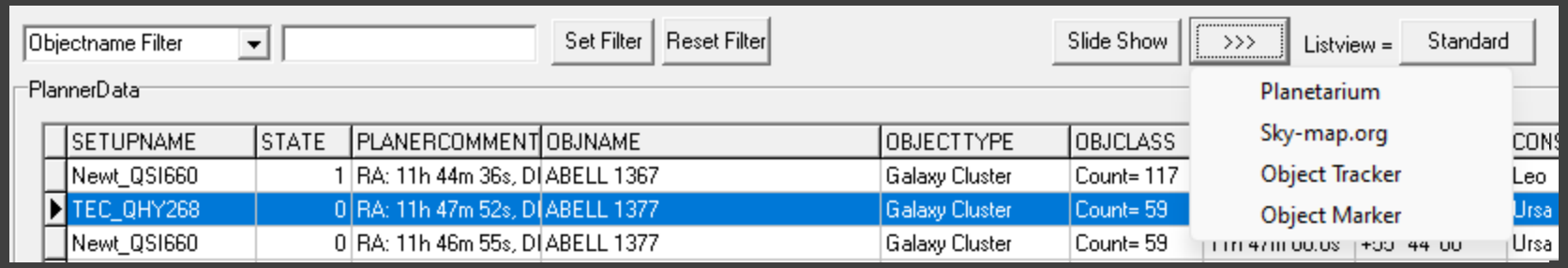
CCD-Guide Browser

- Easy switching between previously set filter states using the keyboard keys “Page up” / “Page down”

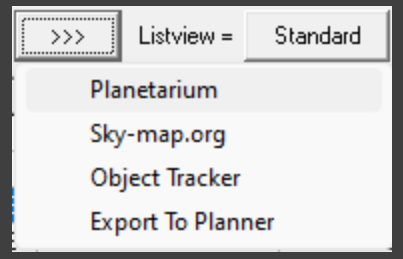




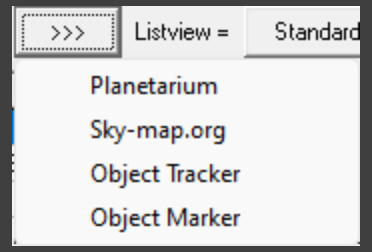
Expert – Action Button (>>>)



- New in „Edit Object“ tab

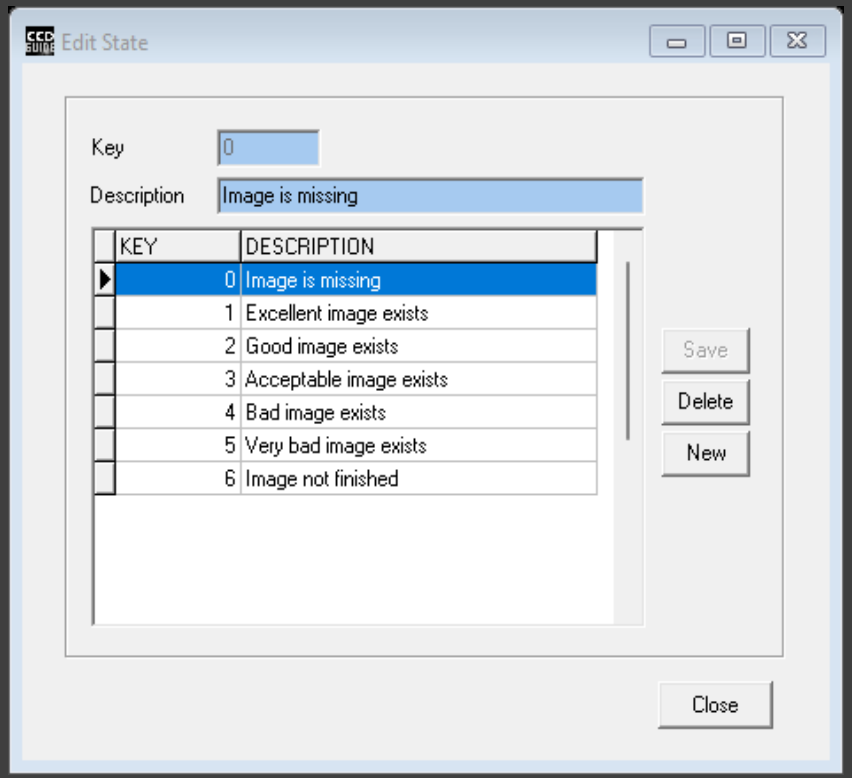


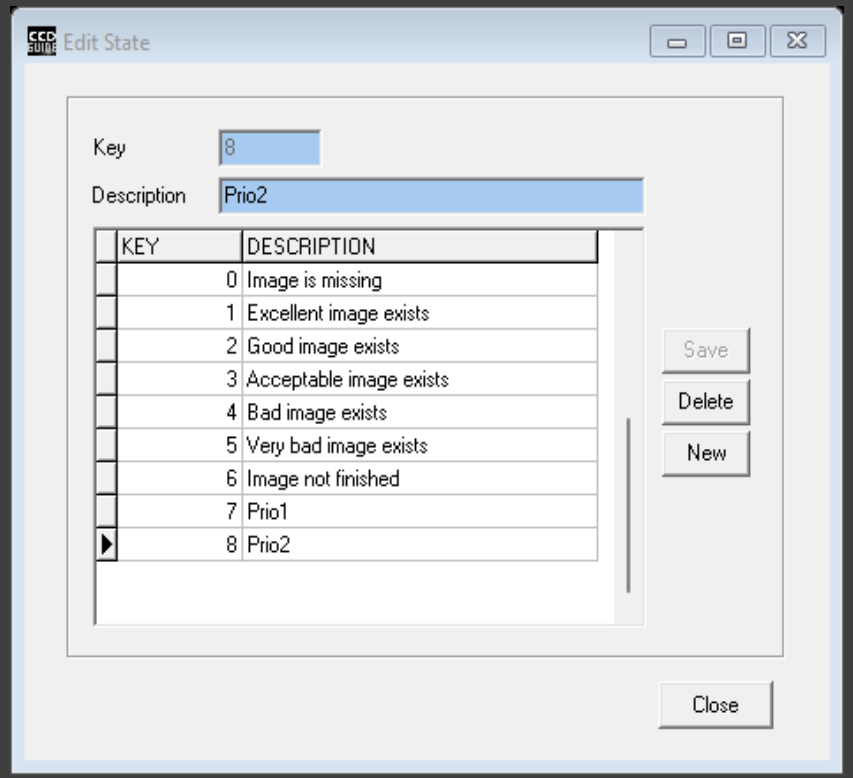
- New in „Edit Picture“ tab



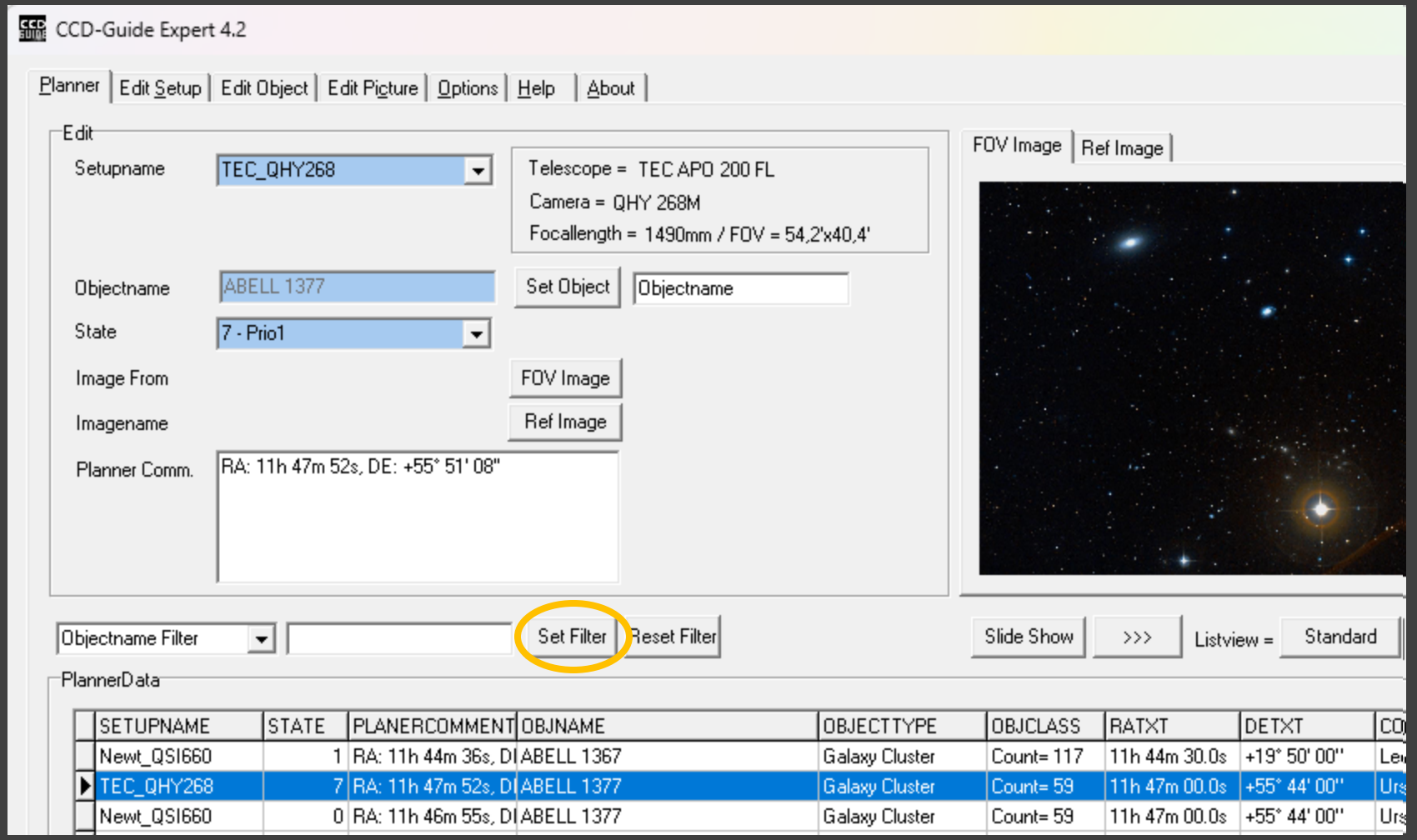
Expert – Edit State

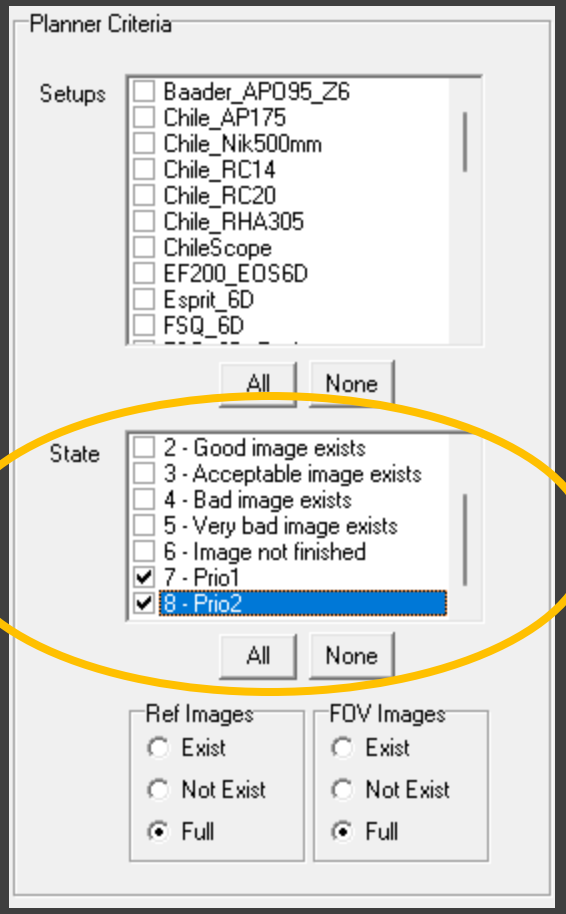
- Edit planner states in „Edit Setup“ tab
- e.g. for defining priorities

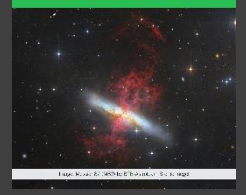




Expert – Multiple selection of states







Expert – „FOV image exists“ Filter

CCD-Guide Expert 4.2

Planner | Edit Setup | Edit Object | Edit Picture | Options | Help | About

Edit

Setupname: TEC_QHY268

Telescope = TEC APO 200 FL
Camera = QHY 268M
Focallength = 1490mm / FOV = 54,2'x40,4'

Objectname: ABELL 1377 — Set Object — Objectname

State: 7 - Prio1

Image From — FOV Image

Imagename — Ref Image

Planner Comm.: RA: 11h 47m 52s, DE: +55° 51' 08"

FOV Image | Ref Image

Objectname Filter — Set Filter — Reset Filter

Slide Show — >>> — Listview = Standard

PlannerData

SETUPNAME	STATE	PLANERCOMMENT	OBJNAME	OBJECTTYPE	OBJCLASS	RATXT	DETXT	CO
Newt_QSI660	1	RA: 11h 44m 36s, DI	ABELL 1367	Galaxy Cluster	Count= 117	11h 44m 30.0s	+19° 50' 00''	Le
TEC_QHY268	7	RA: 11h 47m 52s, DI	ABELL 1377	Galaxy Cluster	Count= 59	11h 47m 00.0s	+55° 44' 00''	Urs
Newt_QSI660	0	RA: 11h 46m 55s, DI	ABELL 1377	Galaxy Cluster	Count= 59	11h 47m 00.0s	+55° 44' 00''	Urs

Planner Criteria

Setups:
- Baader_APO95_Z6
- Chile_AP175
- Chile_Nik500mm
- Chile_RC14
- Chile_RC20
- Chile_RHA305
- ChileScope
- EF200_EOS6D
- Esprit_6D
- FSQ_6D

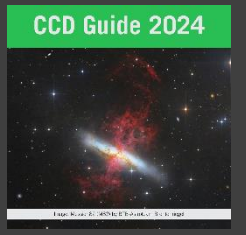
All | None

State:
- 0 - Image is missing
- 1 - Excellent image exists
- 2 - Good image exists
- 3 - Acceptable image exists
- 4 - Bad image exists
- 5 - Very bad image exists
- 6 - Image not finished

All | None

Ref Images: Exist / Not Exist / Full

FOV Images: Exist / Not Exist / Full



Expert – Edit Object

CCD-Guide Expert 4.2

Planner | Edit Setup | Edit Object | Edit Picture | Options | Help | About

ObjectData

Catalogue: UNLISTED

Get Pos

Set Const

RA [h] [m] [s]

DE + [°] ['] ["]

Mag

Comment: PGC 65367

Name: Aquarius Dwarf

RA2000: 20,78138889

DE2000: -12,84888889

Objectsize: 2

Objecttype: Galaxy

RaTxt: 20h 46m 53s

DeTxt: -12° 50' 56"

Constellation: Aquarius

Objectname Filter | Set Filter | Reset Filter

SOURCE	OBJECTNAME	OBJECTTYPE	OBJCLASS	RATXT	RA2000	DETXT	DE2000
USER	UNLISTED Andromeda V	Galaxy	dSph	01h 10m 17s	1,17138889	+47° 37' 41"	47,62805556
USER	UNLISTED Aquarius Dwarf	Galaxy		20h 46m 53s	20,78138889	-12° 50' 56"	-12,84888889
USER	UNLISTED Bernes 71	Reflection Nebula		04h 14m 05s	4,23472222	+28° 12' 48"	28,21333333

Get Pos:

- RA/DE coordinates from clipboard (SIMBAD format)

Basic data :

NAME Aquarius Dwarf -- Galaxy

Other object types: G (2008ApJ,AGC,...), HI (HIPASS)

ICRS coord. *(ep=J2000) :* 20 46 51.7 -12 50 54 (Optical)

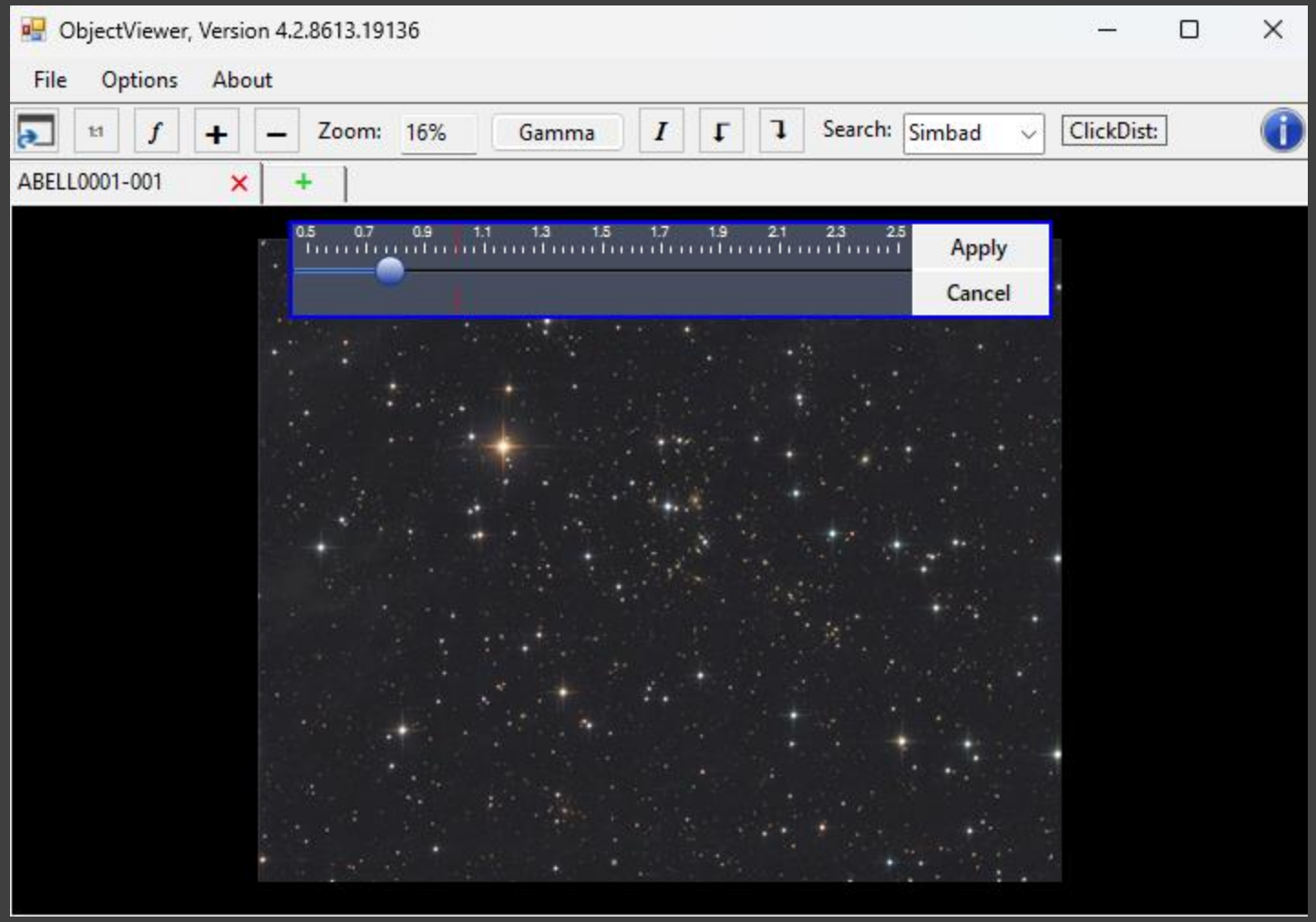
FK4 coord. *(ep=B1950 eq=1950) :* 20 44 06.4 -13 01 56 [ ]

Gal coord. *(ep=J2000) :* 034.0486 -31.3430 [ ]

Set Const:

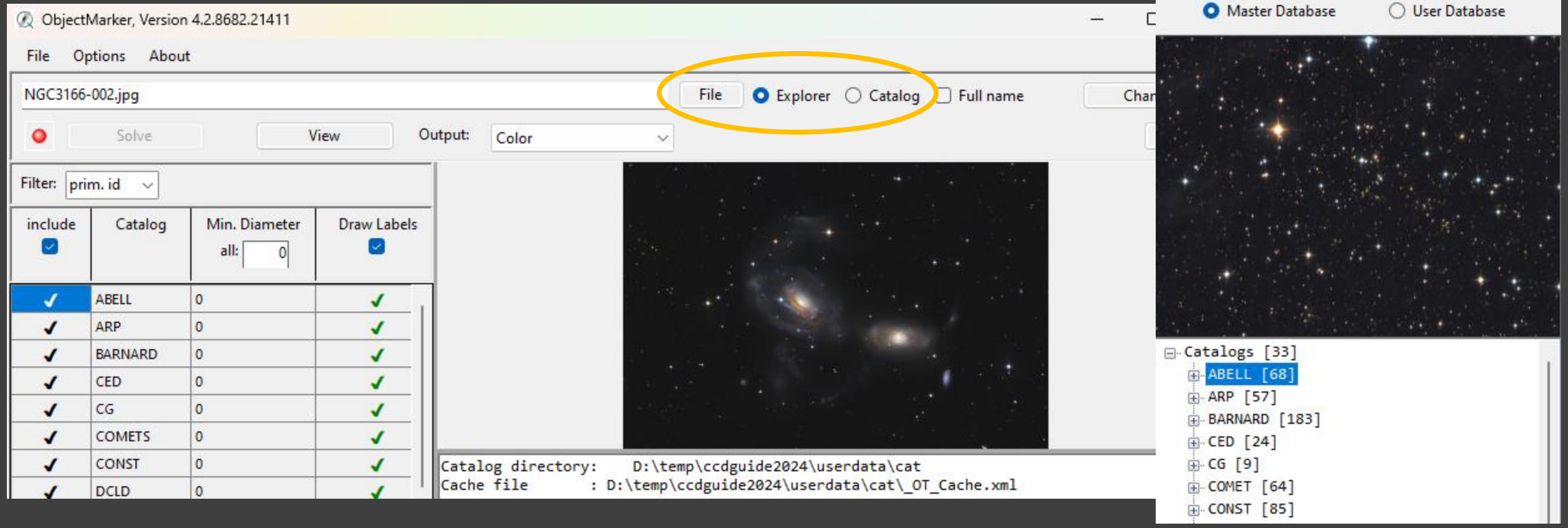
- Set constellation

ObjectViewer – Gamma

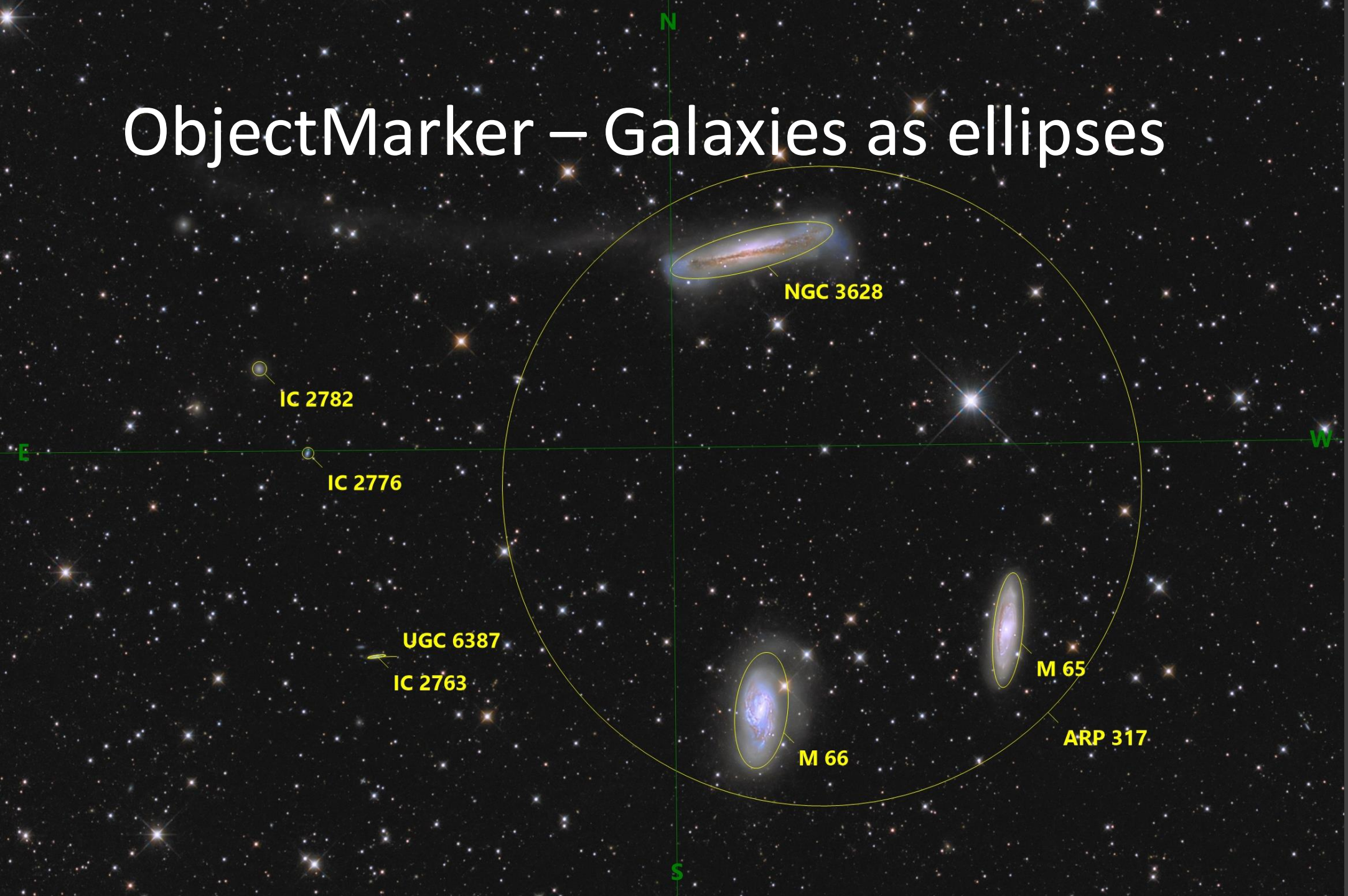


- For each opened image the gamma value can be changed temporarily

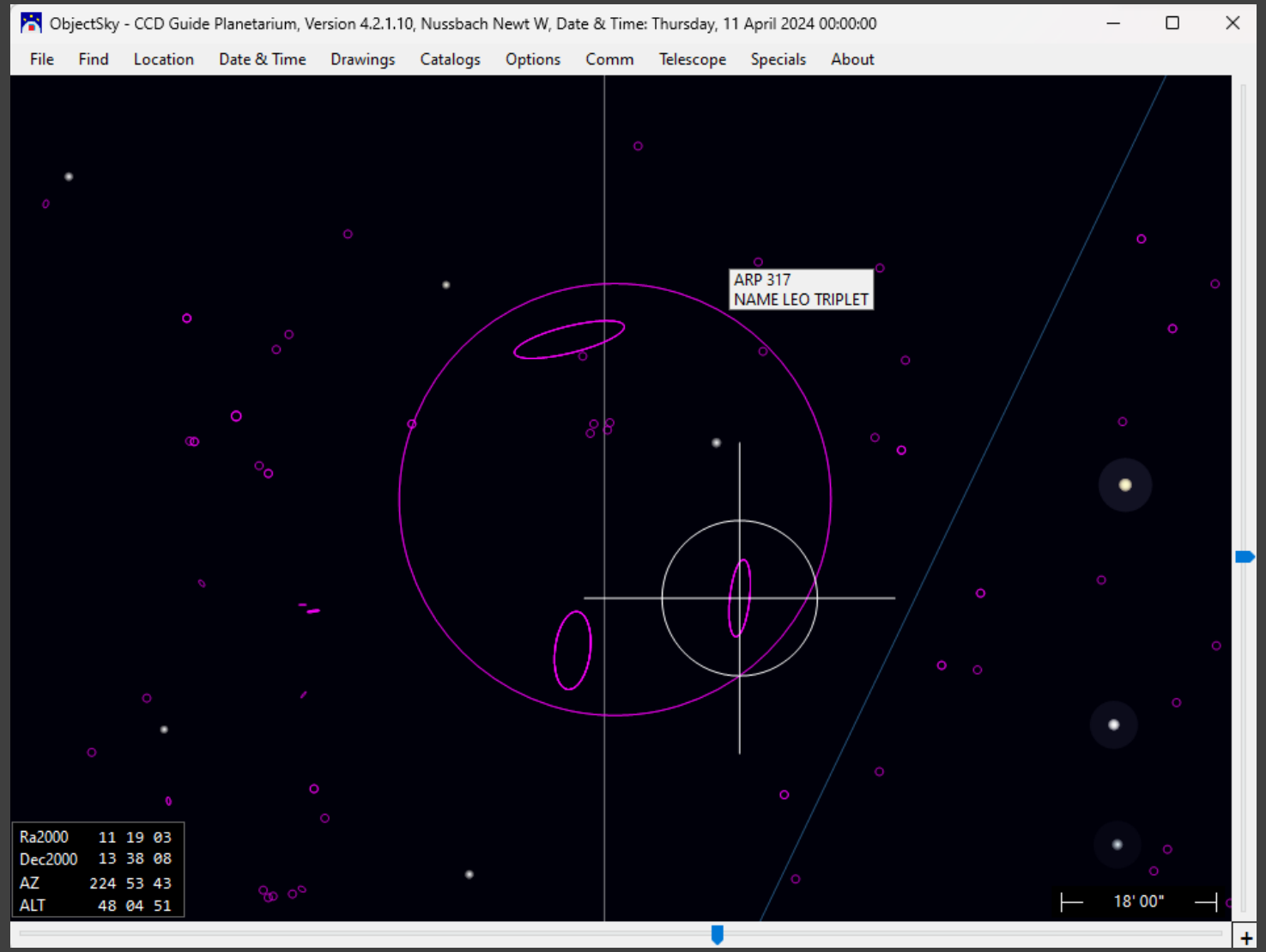
ObjectMarker – File selection



ObjectMarker – Galaxies as ellipses

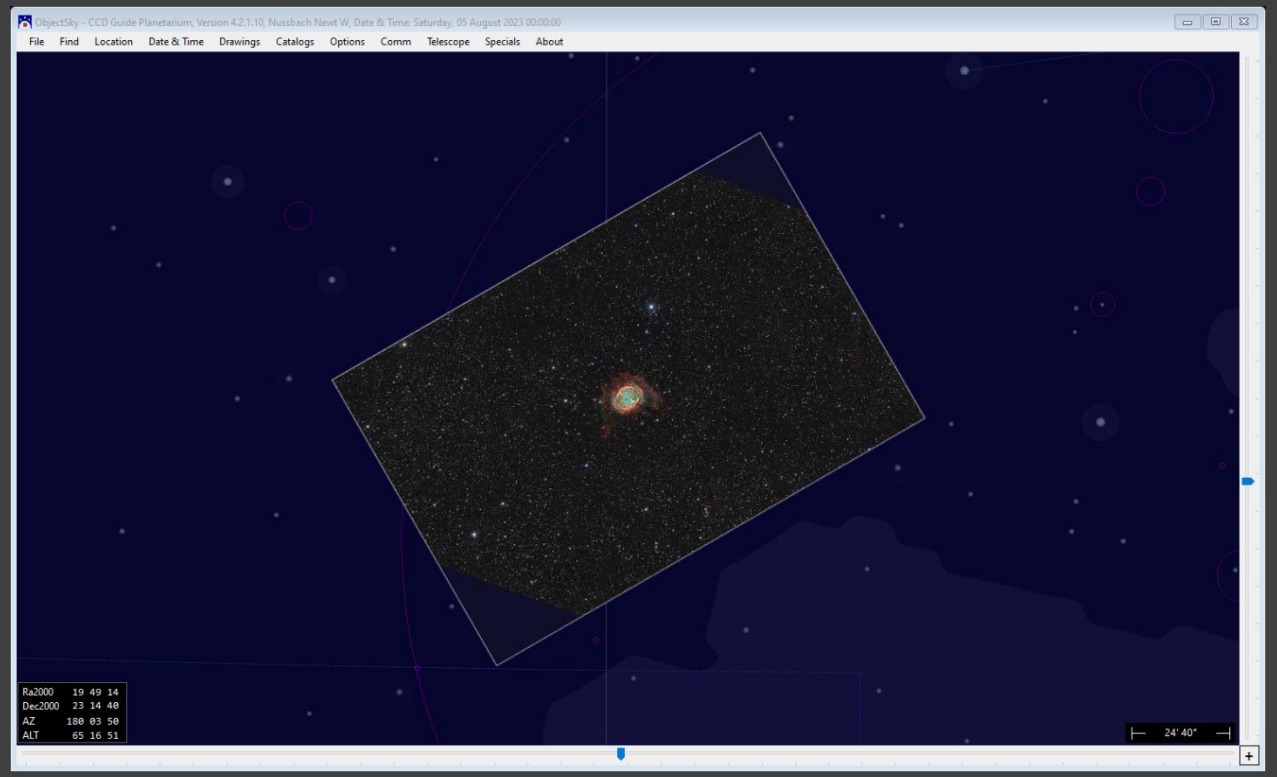


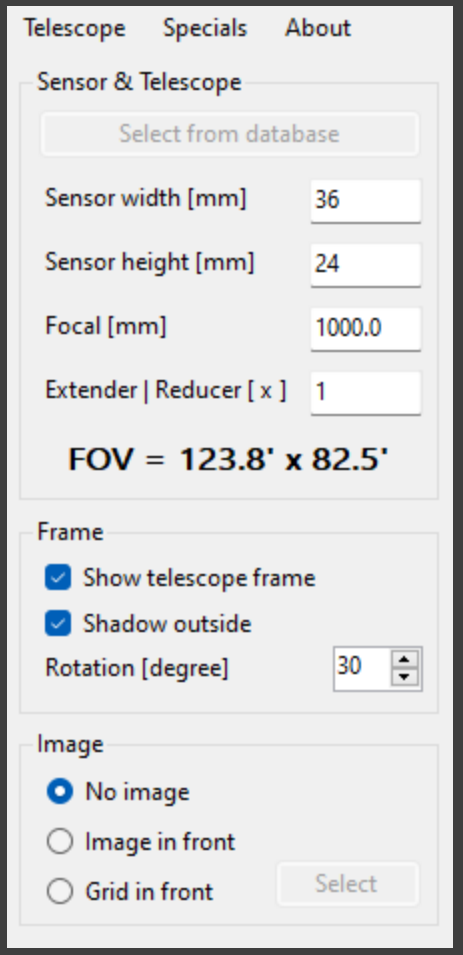
ObjectSky – Galaxies as ellipses



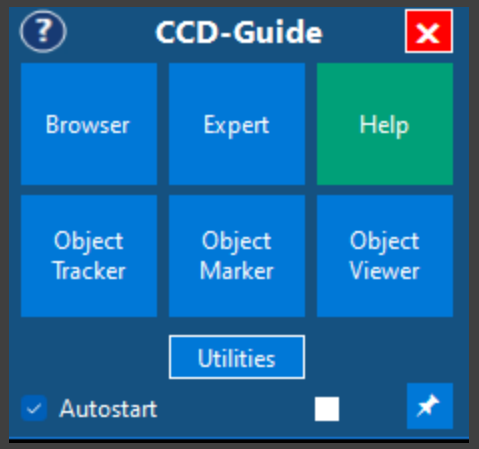
ObjectSky – Telescope

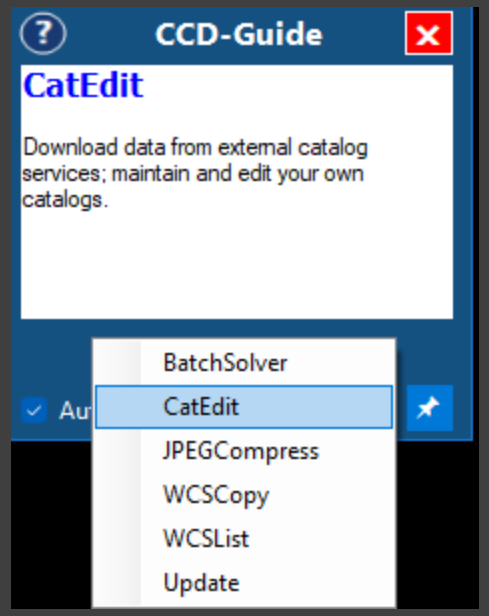
- Image field of a telescope + camera combination





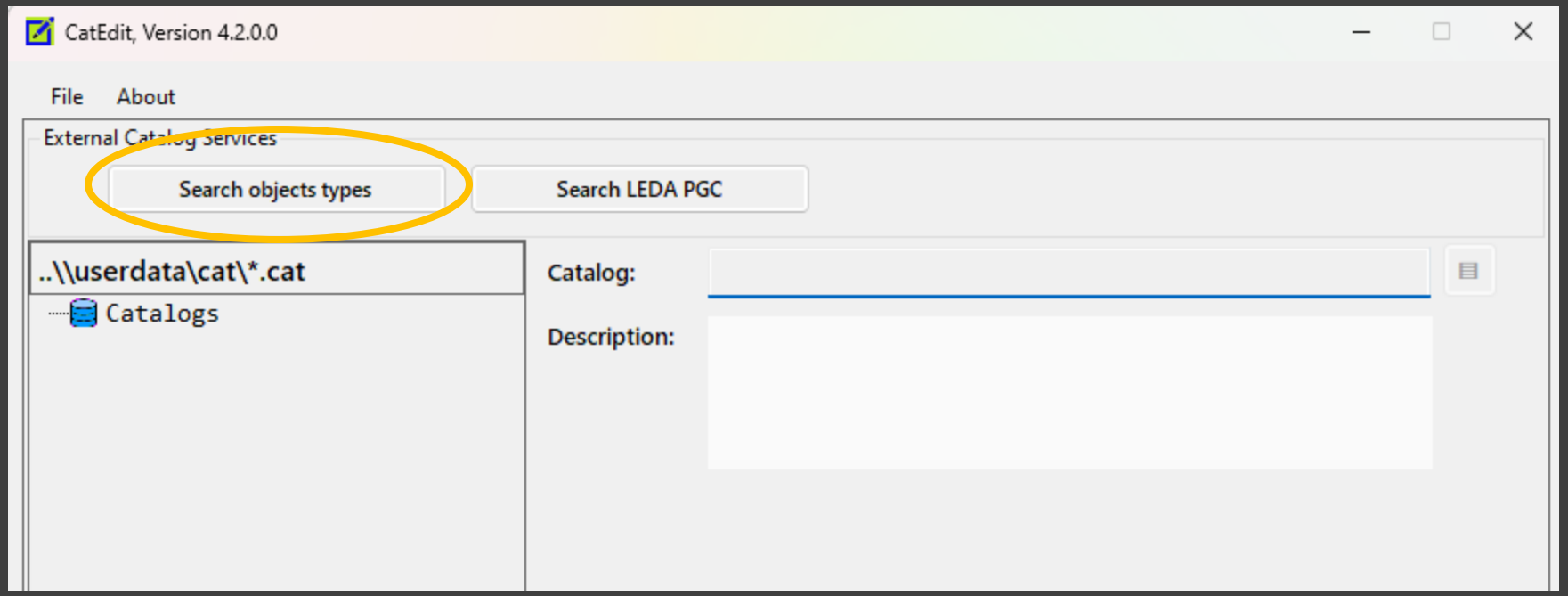
CatEdit – New Utility

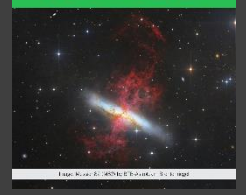




- Download object data from external services
  - VizieR
  - HyperLEDA
- Maintain and edit own catalogs

CatEdit – Search objects types I





CatEdit – Search objects types I

CatEdit, Version 4.2.0.0

File About

External Catalog Services

Search objects types

..\\userdata\cat*.cat

Catalogs

Object type search

Contraints

Field center and dimensions

All sky

Cone

Box

Select an object type to search

Helper: Get Otype

Object type:

Magnitude limits

Filter: none

Mag from: 0

Mag to: 15

Download

Max. count: 100

Download

Object Type	Object name	Ra	Dec	Morph. Type	Size A [arc min]	Size B [arc min]	PA [degree]	Mag	Dist [arc min]

Rows

Count:

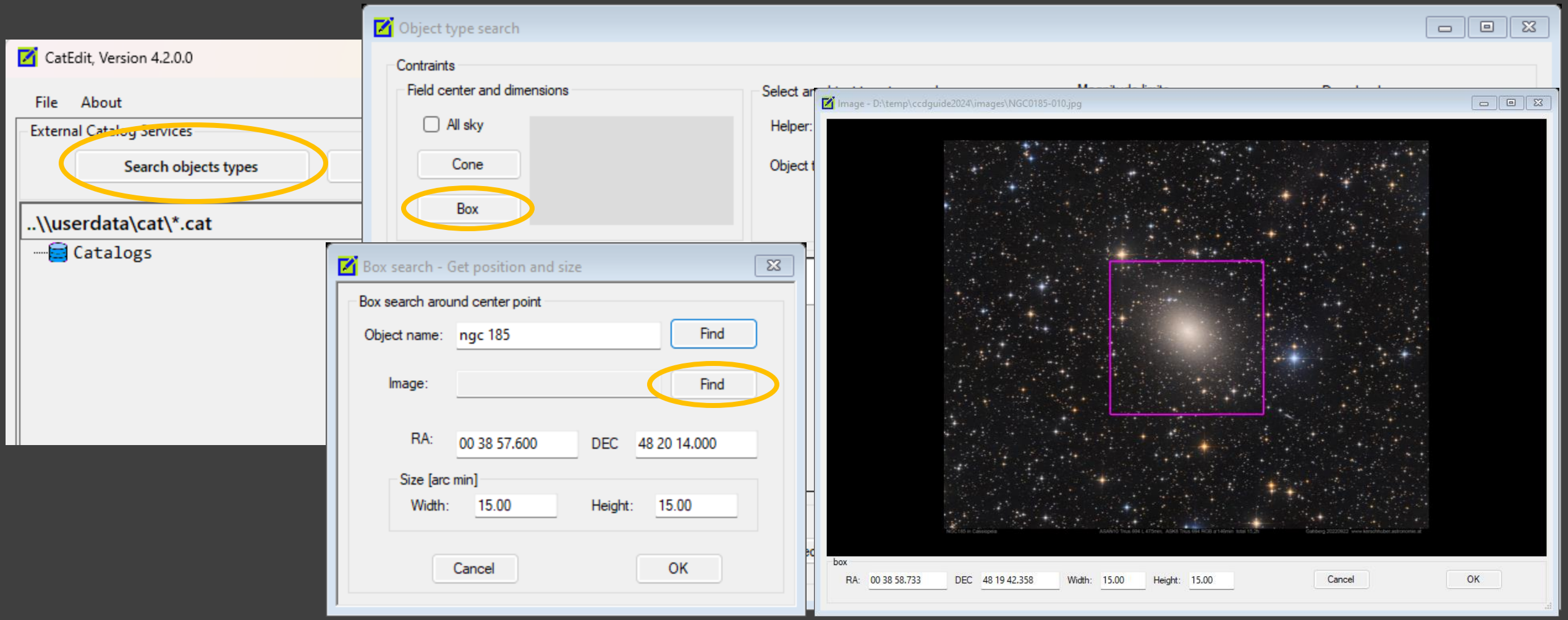
Select all Select none Remove selected

OK

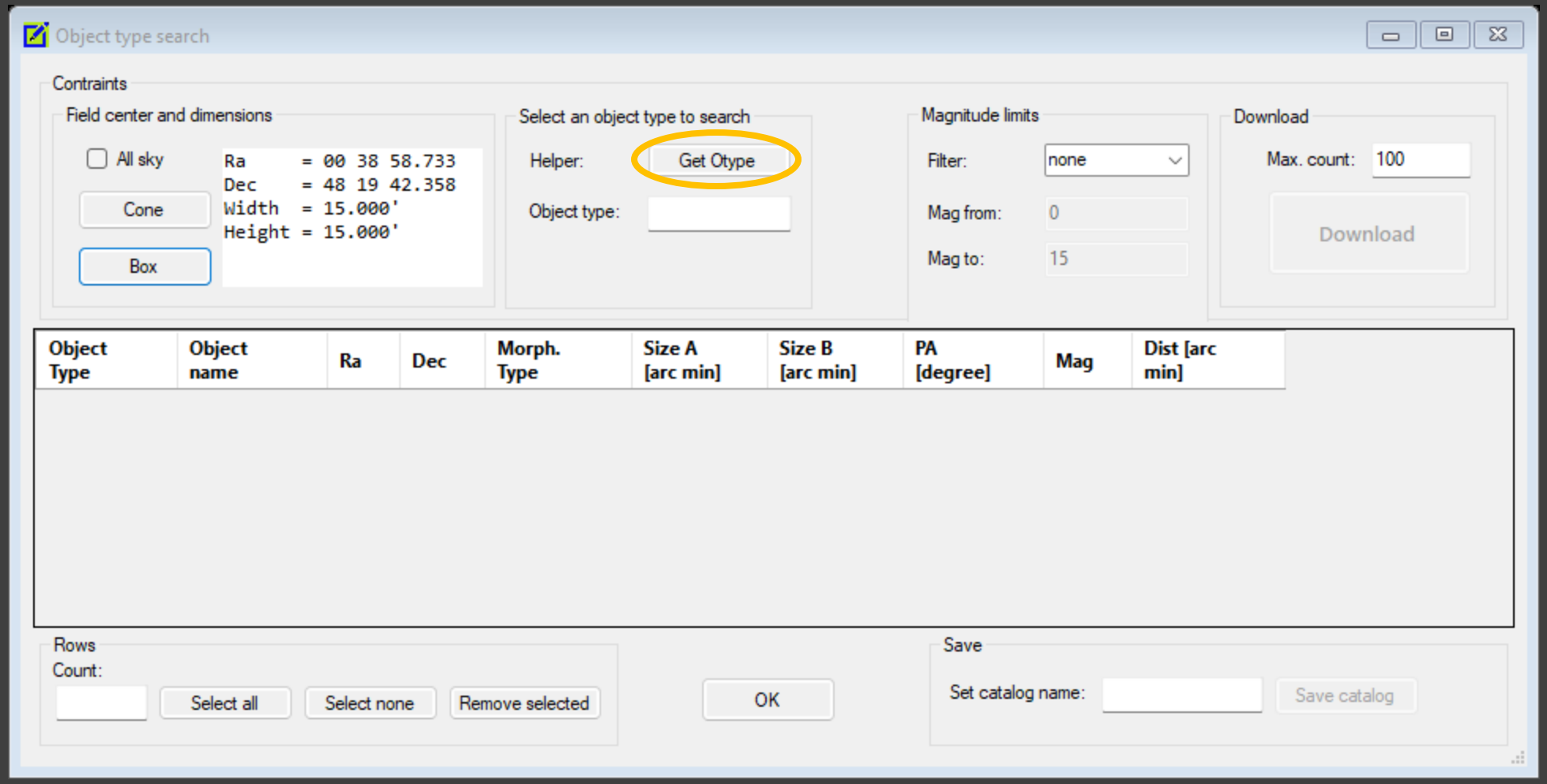
Save

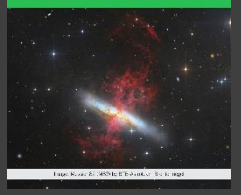
Set catalog name: Save catalog

CatEdit – Search objects types I



CatEdit – Search objects types II





CatEdit – Search o

Object type search

Contraints

Field center and dimensions

All sky

Ra = 00 38 58.733
Dec = 48 19 42.358
Width = 15.000'
Height = 15.000'

Cone

Box

Select an object type to search

Helper: Get Otype

Object type:

Object Type	Object name	Ra	Dec	Morph. Type	Size A [arc min]	Size [arc

Rows
Count:

Select all | Select none | Remove selected

OK

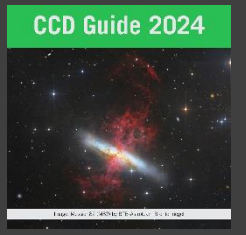
VizieR registered object types

Choose an object type

- **multiple_object Composite object**
  - Region — Region defined in the sky
    - Void — Underdense region of the Universe
  - SuperClG — Supercluster of Galaxies
  - ClG — Cluster of Galaxies
  - GroupG — Group of Galaxies
    - Compact_Gr_G — Compact Group of Galaxies
  - PairG — Pair of Galaxies
    - IG — Interacting Galaxies
  - Cl*? — Possible (open) star cluster
  - GlCl? — Possible Globular Cluster
  - Cl* — Cluster of Stars
    - GlCl — Globular Cluster
    - OpCl — Open (galactic) Cluster
  - Assoc* — Association of Stars
    - Stream* — Stellar Stream
    - MouvGroup — Moving Group
  - ** — Double or multiple star
    - EB* — Eclipsing binary
      - EB*Algol — Eclipsing binary of Algol type
      - EB*betLyr — Eclipsing binary of beta Lyr type
      - EB*WUMa — Eclipsing binary of W UMa type
    - SB* — Spectroscopic binary
    - EllipVar — Ellipsoidal variable Star
    - Symbiotic* — Symbiotic Star

Object type GlC [Globular Cluster]

OK



CatEdit – Search objects types III

Retrieve objects from source file: D:\temp\ccdguide2024\userdata\cat\objt.txt

Contraints

Field center and dimensions

All sky

Cone

Box

```
Ra     = 00 38 58.733
Dec    = 48 19 42.358
Width  = 15.000'
Height = 15.000'
```

Select an object type to search

Helper: Get Otype

Object type: GIC

Magnitude limits

Filter: none

Mag from: 0

Mag to: 15

Download

Max. count: 100

Download

Object Type	Object name	Ra	Dec	Morph. Type	Size A [arc min]	Size B [arc min]	PA [degree]	Mag	Dist [arc min]
GIC	FJJ NGC 185 I	00 38 42.700	48 18 40.400		0.000	0.000	0.000	99.000	2.858
GIC	FJJ NGC 185 II	00 38 48.100	48 18 15.000		0.000	0.000	0.000	99.000	2.290
GIC	FJJ NGC 185 III	00 39 03.800	48 19 57.500		0.000	0.000	0.000	99.000	0.879
GIC	FJJ NGC 185 IV	00 39 12.200	48 22 48.200		0.000	0.000	0.000	99.000	3.821
GIC	FJJ NGC 185 V	00 39 13.400	48 23 04.900		0.000	0.000	0.000	99.000	4.163
GIC	FJJ NGC 185 VII	00 39 18.400	48 23 03.600		0.000	0.000	0.000	99.000	4.682

Rows

Count: 6

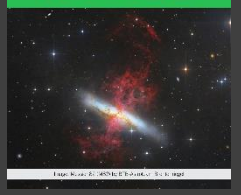
Select all | Select none | Remove selected

OK

Save

Set catalog name: NGC0185_GCL

Save catalog



CatEdit – Search objects types IV

CatEdit, Version 4.2.0.0

File About

External Catalog Services

Search objects types | Search LEDA PGC

..\\userdata\cat*.cat

- Catalogs
  - NGC0185_GCL
    - FJJ NGC 185 I
    - FJJ NGC 185 II
    - FJJ NGC 185 III
    - FJJ NGC 185 IV
    - FJJ NGC 185 V
    - FJJ NGC 185 VII

Catalog: NGC0185_GCL

Description: Simbad query
reference: D:\temp\ccdguide2024\images\NGC0185-010.jpg
object type GIC
box 9.744721,48.328433,0.25,0.25)

Object name: FJJ NGC 185 II

2/6

Ra: 00 38 48.100 Dec: 48 18 15.000

Mag: 99

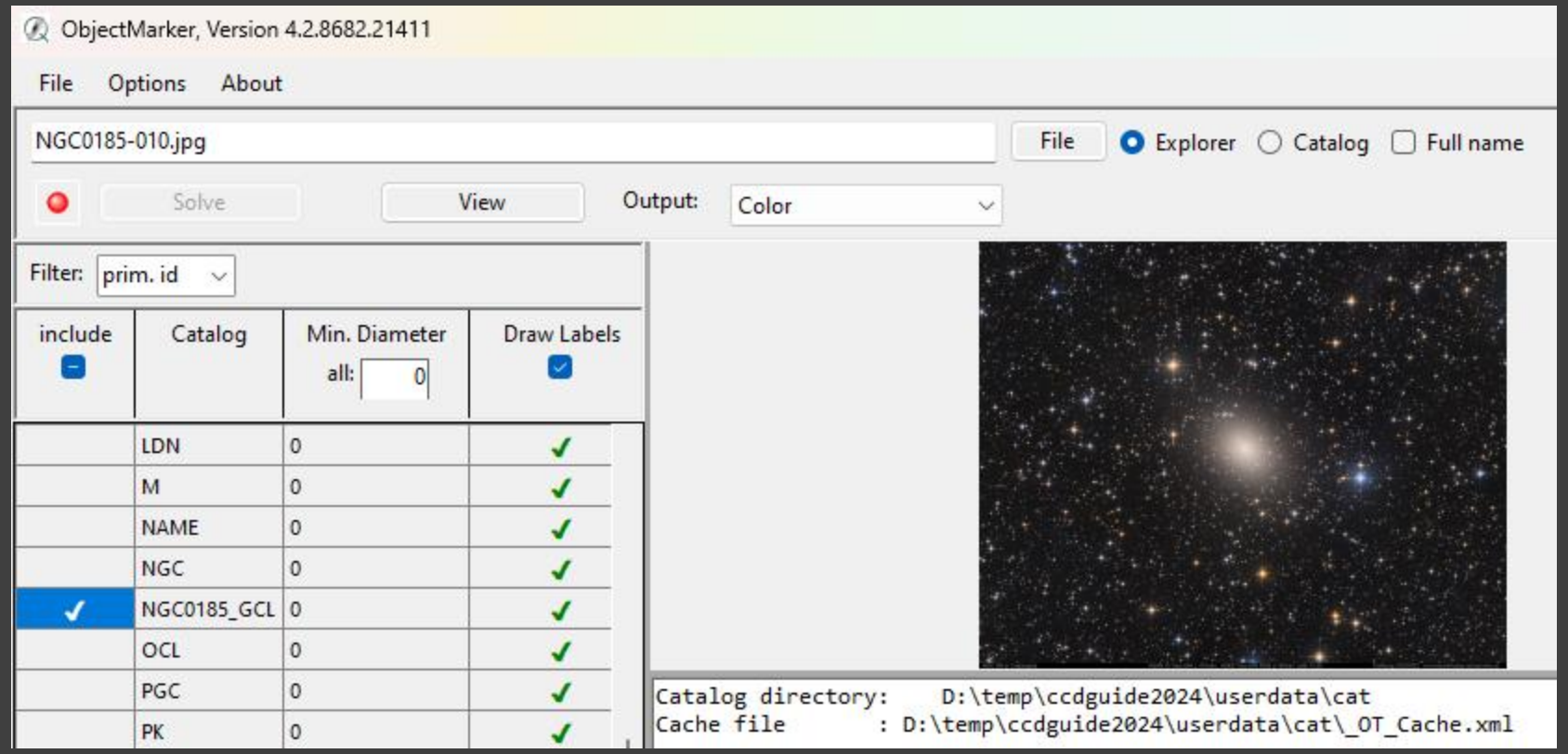
NB: 99 SB: 99

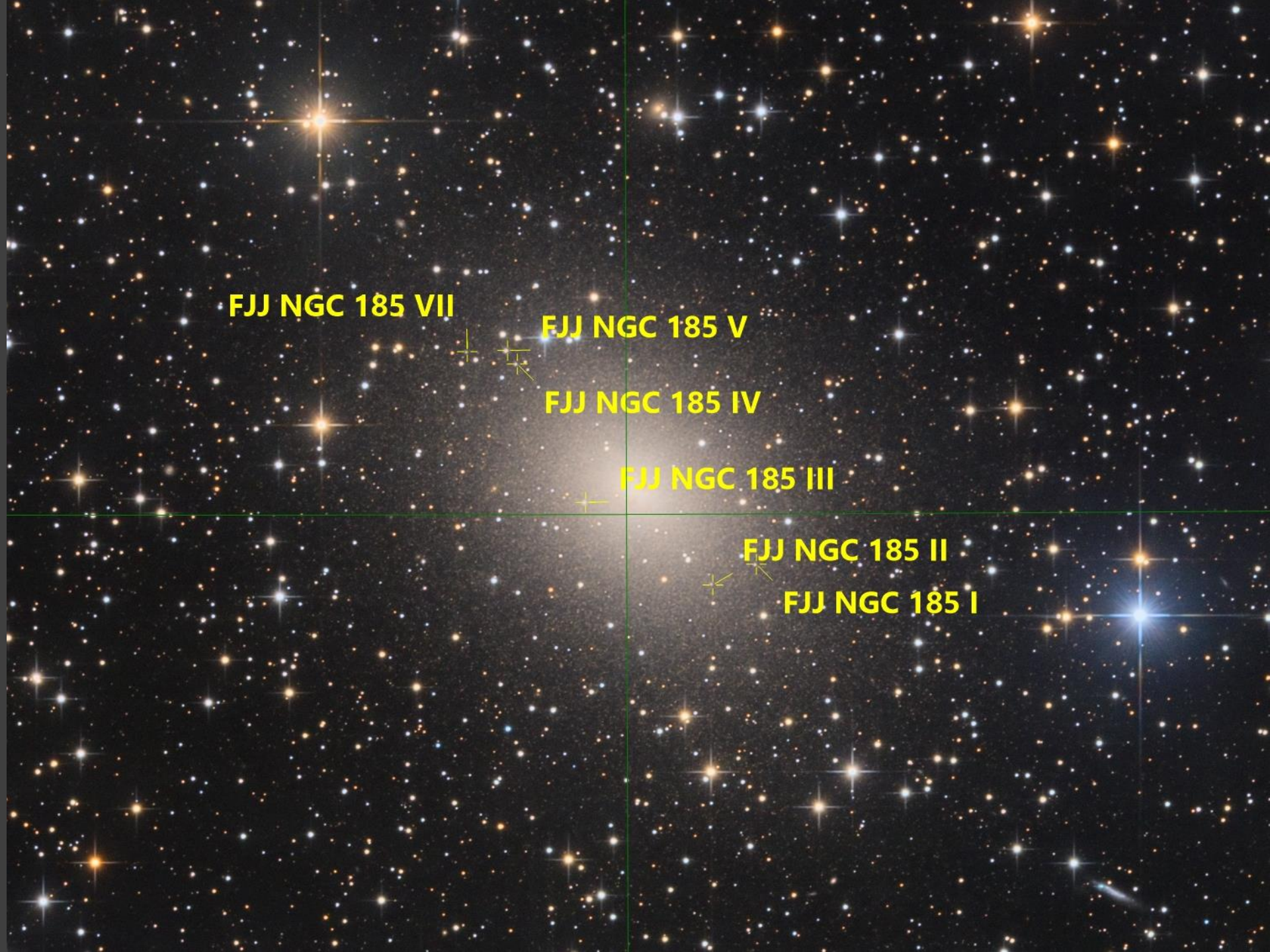
ObjSizeA: 0 ObjSizeB: 0

PA: 0

ObjType: GlC MType: ConstType: CAS

CatEdit – What for?




FJJ NGC 185 VII
FJJ NGC 185 V
FJJ NGC 185 IV
FJJ NGC 185 III
FJJ NGC 185 II
FJJ NGC 185 I

Hands on CCD-Guide

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